RE: Z-layer sample within the cofferdam- have you run it more than once?

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AE

Amy Essig Desai <aedesai@farallonconsulting.com>

Thu 9/25/2014 3:20 PM

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To: Chu Rebecca; ☐ Ryan Barth <rbarth@anchorqea.com>;

☐ Training Opportunities

Flag for follow up. Start by Monday, September 29, 2014. Due by Monday, September 29, 2014.

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Figure 1 - Actual Z-Laye... 504 KB

Jorg_EAA Z-layer PRELI... 616 KB

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Becky –

The z-layer sediment samples were collected, consistent with the CQAP, using a hydraulic grab sampler and a single sample was collected from a composite of the 0-1 foot interval. No cores were collected and no archive material is available to facilitate additional chemical analysis and averaging.

As we discussed during our meeting yesterday, attached please find the PRELIMINARY UNVALIDATED shoreline and sediment z-layer sampling locations, data, and collection information. We will initiate validation of the data and submit the final validated data in the Removal Action Completion Report.

Also, as a reminder, the CQAP stated the following regarding evaluation of the z-layer sediment total PCB results:

"EPA has acknowledged that the removal action activities may result in a thin layer of sediments with residual total PCB concentrations deposited on the final post-dredge surface. Because of this acknowledgement, coupled with the extensive surface and subsurface data collected within the RAB, EPA approved the Final EE/CA condition that the results of any post-dredge sampling and analysis would not trigger any further remedial actions unless the area weighted concentrations in the RAB are greater than 20 times the RvAL or 240 milligrams per kilogram normalized for organic carbon. In this situation, further evaluation would be required and these data would be used to document that the surface backfill concentrations in this area(s) remain protective of human health and the environment based on the surface weighted average concentrations in the RAB."

This text ties evaluations of the surface weighted average concentrations of the surface backfill concentrations, not the z-layer sampling surface that has been overlain by 4 to 15 feet of clean imported backfill (including GAC amended filter material and rip rap at two locations along the toe of slope and the single location in the cofferdam). In accordance with the long-term OMMP (Appendix F of the BODR), surface sediment (0-10 cm) samples will be collected from 6 locations within the RAB and 12 locations adjacent and upriver of the RAB to evaluate changes in the surface backfill concentrations within the RAB in Years 1, 3, 5, 7 and 10 following construction. This sampling will document the increase in sediment concentrations in the clean placed backfill due to ongoing waterway-wide source loading beyond the control of EMJ. If necessary, this data can be used to document the increase in surface weighted average concentrations within the RAB due to this ongoing loading during each monitoring year.

Let us know if you have any further questions or comments on this issue.

Thanks,
-Amy

From: Chu Rebecca [mailto:Chu.Rebecca@epa.gov]
Sent: Wednesday, September 24, 2014 12:26 PM
To: Amy Essig Desai; Ryan Barth
Subject: Z-layer sample within the cofferdam- have you run it more than once?

Hi Amy and Ryan

I was talking with Shawn and Karen K about the unvalidated Z-layer sample data. A suggestion was that you may want to run another sample or two since you don't have a way to come up with a spatial weighted average. I was not sure if you mixed the full 12" core together and pulled a sample from that, or if the sample was just pulled from the core itself. However- food for thought is that you run more than one sample from the core and then average it together.

Becky

Rebecca Chu | Remedial Project Manager
United States Environmental Protection Agency
Region 10
1200 Sixth Ave Suite 900
ECL-111
Seattle, WA 98101
(206) 553-1774
chu.rebecca@epa.gov